

## NOTES ON AUSTRALIAN LYCAENIDÆ.

## PART v.

BY G. A. WATERHOUSE, B.Sc., B.E., F.E.S.

DANIS SYRIUS Miskin.

Proc. Linn. Soc. N.S. Wales, 1890, p. 34 (N. Queensland): *D. apollonius* Waterhouse, (nec Felder), *l.c.* 1903, p. 147 (C. York).

I have again examined the types of this species in the Queensland Museum. They are in very poor condition, and I find they are both males, and not a male and a female, as Miskin supposed. In these Proceedings for 1903 (p. 149), I suggested that these examples might be identical with the species I then recorded as *D. apollonius*; I am now quite convinced that this is so, and as the larger Cape York *Danis* is distinct from typical *D. apollonius* from New Guinea, Miskin's name must stand. One of the specimens in the Miskin Collection is labelled C. York.

DANIS SALAMANDRI Macleay.

Proc. Ent. Soc. N. S. Wales, 1866, i., p. liv. (C. York): *D. Macleayi* Semper, Journ. Mus. Godf., Lep., p. 154, 1878 (C. York).

Further examples of this species have reached me from Cape York, and they show that Semper was right in separating it from *D. taygetus* Felder. The name *salamandri* is the older one, and though the specimen in the Macleay Museum is in too poor condition to clearly show its distinctions from *D. taygetus*, its locality is sufficient to prove its identity.

MILETUS EUCLIDES Miskin.

*Hypochrysops euclides* Miskin, Proc. Linn. Soc. N. S. Wales, 1888, p. 1517 (Gippsland, *loc. err.*): *Miletus meleagris* Waterhouse, *l.c.* 1903, p. 270 (Cardwell).

I have shown\* that, misled by an erroneous locality, I redescribed this rare species. It is known only from Cardwell, Kuranda, and Port Douglas, all Northern Queensland localities.

\* Vict. Nat. 1910, p. 158.

## CANDALIDES SIMPLEXA Tepper.

*Cupido simplexa*, Trans. Roy. Soc. S. Aust., 1882, p. 30, t.2, Fig. 10 (Monarto, S. Aust.): *Polyommatus cyanites* Meyrick, Proc. Linn. Soc. N. S. Wales, 1887, p. 828 (Geraldton, W.A.).

This is the race of *C. hyacinthina* which occurs in north-western Victoria and in South Australia, as well as in West Australia. I have not been able to compare Geraldton examples with those from South Australia, but there is nothing in Meyrick's description to point to any distinctions. *C. hyacinthina* is confined to Eastern Australia.

## PHILIRIS Röber.

Tijd. voor Ent., 1891, p. 317 (type *ilias* Felder).

The genus is considered, by Mr. Bethune Baker,\* to be insufficiently differentiated from *Candalides* Hubner (type *xanthospilos*). In addition to a well-marked facies of the imagines, the pupæ supply good characters by which the two genera can be readily distinguished. The pupa of *P. innotatus* Miskin, is covered with short fine hairs, the head is smooth, and the cross-section of the abdomen (as usual with Lycaenid pupæ) is ovoid. The pupa of *C. assimilis*, of *C. gilberti*, of *C. heathi*, and of *C. hyacinthina* (that of *C. xanthospilos* is not yet known) is much flattened, the abdomen being produced to lateral ridges, and the head has two flattened processes. These marked pupal differences, with the shape of the imagines, are quite sufficient to substantiate the genus.

## PSEUDODIPSAS CEPHENES Hewitson.

Trans. Ent. Soc. London, 1874, p. 344 (India, *loc. err.*): *id.*, Ill. Diurn. Lep. Lyc., p. 219, Pl. 89, fig. 3, 4, 1878 (India, *loc. err.*); *Ps. fumidus* Miskin, Proc. Roy. Soc. Qld., 1889, p. 264 (Brisbane).

Hewitson received his specimen from W. E. Atkinson, to whom Miskin sent many Queensland butterflies. This type is the only specimen recorded from India, and, in the British Museum collection, an example of *Ps. fumidus* from Queensland is placed with it. No points of difference can be detected, and Hewitson's figure so

\* *Novitates Zoologicae*, 1904, p. 369.

accurately represents Miskin's species, that the only conclusion possible is, that the recorded locality is erroneous, and *Ps. cephenes* is an Australian and not an Indian species.

**ZIZERA** Moore.

*Lep. Ceylon*, i., p. 78, 1881.

Dr. Chapman has shown that Moore's diagnosis of this genus is faulty, and does not even agree with the type assigned to it. Three of the species usually placed in *Zizera* belong to three different genera, and these Dr. Chapman defines.\*

The Australian species thus become *Zizina labradorus* Godart, *Zizina delospila* Waterhouse, *Zizula gaika* Trimen, *Zizeeria kar-sandra* Moore, and *Zizeeria alsulus* Herrich-Schaeffer.

**NACADUBA TASMANICA** Miskin.

*Lycaenesthes tasmanicus* Miskin, Proc. Linn. Soc. N. S. Wales, 1890, p. 40 (Tasmania, *loc. err.*) : *N. palmyra* Waterhouse (nec Felder), *l.c.*, 1903, p. 228 (Brisbane, Cairns) : *Lycaena elaborata* Lucas, Proc. Roy. Soc. Qsld., 1899, p. 137 (1900) (Brisbane).

The sexes of *N. palmyra* have reached me from the Aru Islands, and I find that our representative is distinct. Miskin's name, therefore, stands, though unfortunately based upon an erroneous locality.

**THECLINESTHES ONYCHA** Hewitson.

*Utica onycha* Hew., Ill. Diurn. Lep., Lyc., p. 56, t.24, Figs. 11, 12, 1865 (Australia).

Hewitson's type is a female, and agrees best with specimens from North Queensland, which are taken in company with a blue male. A very similar lilac male, as well as the blue one, occurs at Kuranda, and Mr. Dodd tells me that their food-plants are different. South of Townsville, only the lilac males have been taken, and these have been described by Lucas as *Theclinesthes miskini*. This species is, I am convinced, distinct, and not a geographical race of *T. onycha*; so the name *T. miskini* must be revived for the species with a lilac male and a female with brown underside; this

\* Trans. Ent. Soc. London, 1910, pp. 479-497.

occurs in New South Wales, and in Queensland as far north as Kuranda.

I propose, therefore, to restrict Hewitson's name to the species with a blue male and a female with whitish underside; this occurs at Kuranda, Cooktown, and Cape York, and its place in New South Wales is probably taken by *T. onycha* var. *atrosuffusa* Waterhouse.

#### PSEUDALMENUS CHLORINDA Blanchard.

*Thecla chlorinda*, Voyage Pôle Sud, pl. 3, figs. 15-18, ante 1853 (Tasmania): text, p. 401, 1853: *Thecla myrsilus* Doubleday, Gen. Diurn. Lep., ii., pl. 75, fig. 3, 1852 (Van Diemen's Land).

The figures and localities show clearly that these two names represent the same species, but there has been some little doubt which name held the better claim to priority. The name *chlorinda* first appears on the plates of the Voyage au Pôle Sud, which were published several years before the text.\* It is again mentioned on page 401, in the text of Vol. iv., where *Thecla myrsilus* is given as a synonym. The name *myrsilus* first appears without description in Doubleday's List of the Butterflies of the British Museum. It is adopted in the Genera, and figured but not described, and the following species listed is *Thecla chlorinda* Blanchard. This shows that the Pôle Sud figure was earlier than that in the Genera, and, at that time, no description of either species had been published. The first description of *chlorinda* is given in Vol. iv., p. 401, of the Pôle Sud, 1853.

It was under the name *chlorinda*, the species was first figured, and several years later first described; therefore, this name has precedence. Doubleday's List may be of earlier date, but this gave nothing, except the locality, to indicate what species his *myrsilus* represented.

#### IALMENUS ICILIUS Hewitson.

Ill. Diurn. Lep., Lyc., p. 54, pl. 24, fig. 3, 1865 (Swan River): *I. inous* Waterhouse (*nec* Hew.), Proc. Linn. Soc. N. S. Wales, 1903, p. 259 (Victoria, South Australia).

\* Voyage Pôle Sud, Vol. 4, p. 2, 1853.

When my revisional paper was written in 1903, I knew but one *Ialmenus* from West Australia, and as Hewitson's descriptions of *I. icilius* and *I. inous* differed only in very minor points, I wrongly concluded they both represented the same species. I now have two distinct species from the West, and I find that the one to which I applied the name *I. inous*, is correctly *I. icilius*. It may be recognised as follows:—

♂. Above. Forewing smoky-brown; small centrobasal area, metallic green. Hindwing smoky-brown; small centrobasal area, metallic green; tornal spots irregular, small, black crowned with dull orange.

Beneath. Forewing dull pale brown; markings pale brown, sometimes almost obsolete. Hindwing dull pale-brown; markings pale-brown, sometimes almost obsolete; tornal spots as above.

♀. Above as in ♂; centrobasal areas metallic blue. Beneath as in ♂.

*Loc.*—Perth, Adelaide, Victoria.

This species is distinctly smaller than *I. inous*.

#### IALMENUS INOUS Hewitson.

Ill. Diurn. Lep., Lye., p. 54, pl. 24, figs. 1, 2, 1854 (Swan River): not *I. inous* Waterhouse, Proc. Linn. Soc. N. S. Wales, 1903, p. 259.

♂. Above. Forewing dark brown; centrobasal area metallic green. Hindwing dark brown; centrobasal area metallic green; tornal spots irregular, large, black crowned with reddish-orange.

Beneath. Forewing pale-brown; markings broad, brown, edged white; subterminal band broad, brown, edged white. Hindwing pale-brown; markings broad, brown, edged white; tornal spots as above.

♀. Above as in ♂; centrobasal areas metallic blue. Beneath as in ♂.

*Loc.*—Waroona, Carnarvon.

The above two descriptions will place these two species beyond doubt, which Hewitson's descriptions and figures fail to do.